



## **Naphthalene Pest Control**

### **May 19, 2006**

On Tuesday, May 16, 2006, the Chemical Hazards Program (CHP) received a call from a resident, who was concerned about her neighbor's use of Snake Away, a chemical snake repellent whose main ingredients are naphthalene and sulfur. The resident was concerned about health effects from exposure to naphthalene in ambient air via inhalation. She described her neighbors as using 16-20 lbs of Snake Away on their lawn at their home, including on a mounded area separating the two properties (the directed amount suggests sprinkles of repellent in strategic places, and 4 lbs treating greater than an acre of land). The resident's neighbors are an Asian family who speak English, but do not read it very well. The neighbors spread Snake Away on their lawn roughly 3 weeks ago at the end of April.

I noted the symptoms of the resident and her renter. The resident described her symptoms to consist primarily of headaches, sleeplessness, and abdominal pain. Her renter was experiencing severe eye irritation and difficulty breathing, to the degree that she can't go outside without getting ill. The renter lives on the basement/1<sup>st</sup> floor of the single family home, and the homeowner lives on the top floors. The resident has seen her doctor and had blood workup done to determine if there is anything unusual (organs functioning normally, etc.) Her blood results showed nothing unusual and the doctor determined everything to be completely normal.

The resident mentioned that she has tried contacting many agencies about this issue, and has gotten no help. She would like someone to come to her home and sample the air, to clean up the yard, and to educate her neighbors. I informed her that CHP can assist her in educating her neighbors; however we do not provide environmental sampling. She was also concerned about hemolytic cell damage and death, and about the possibility of developing cancer.

On May 19<sup>th</sup>, I explained to the resident that naphthalene (like in mothballs) is a solid that evaporates easily. Naphthalene can dissolve in water to a limited degree, and can become weakly attached to soil, and that in air, moisture and sunlight break it down within 1 day. In

water, bacteria break it down or it evaporates into the air. Naphthalene does not accumulate in the flesh of animals or fish that you might eat.

I also highlighted from the Agency for Toxic Substances and Disease Registry's naphthalene fact sheet that exposure to large amounts of naphthalene may damage or destroy some red blood cells. I mentioned that this could cause too few red blood cells until the body replaces the destroyed cells (called hemolytic anemia). There is no direct evidence in humans that naphthalene causes cancer. However, cancer from lifelong naphthalene exposure has been seen in animal studies. Some female mice that breathed naphthalene vapors daily for a lifetime developed lung tumors. I also explained that a healthy body is efficient at clearing out damaged blood cells and removing toxins. I reminded her that her blood test came back normal, but that if she has further concerns, she should discuss that with her doctor. I also mentioned that if she has concerns after an exposure to a poison, that she can contact the Georgia Poison Control Center (GPCC).

The resident was very happy to receive the information and mentioned that the smell has reduced quite a bit and that she is now able to sleep better and is feeling better. We discussed approaching her neighbors with information factsheets, using mothballs in small quantities (up to 5 mothballs at a time) placed in strategic places around the home, and alternatives to naphthalene containing products. We discussed that exercise and diet are primary factors for cancer risk, and that she could help her body remove the toxins (naphthalene) by eating fresh foods. I faxed her several information factsheets including the Agency for Toxic Substances and Disease Registry's ToxFAQ on Naphthalene, the American Cancer Society's brochure on 10 ways to reduce cancer risk, a factsheet from the University of Georgia Cooperative Extension Service on Snake Control, and website addresses for all of the above.